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In response to the proposed changes to underwater bridge inspection procedures, we offer the following for your consideration:

1. In theory, putting a PE-Diver in the water is ideal means of performing a high quality underwater inspection. The real problem which presents itself is that there is an extremely small pool of PE-Divers who qualify under this more stringent requirement. We would estimate that nationwide, there are probably less than a hundred sufficiently qualified Professional Engineers with bridge expertise, who are also physically capable of operating in the rugged underwater environment. We earnestly believe that no matter the crew composition, there must be a member who is a professional engineer able to dive. Certain conditions require the practiced eye of a professional engineer.

2. Increasing the underwater inspection time interval to greater than five (5) years may be acceptable for non-scour critical, pile supported substructure units which are composed of not degradable materials in non corrosive waters. But increasing the interval may be dangerous nevertheless, since severe corrosion, erosion, and/or marine borer activity can "suddenly" develop within a five (5) year period. Such developments can be the result of changes in water chemistry, such as dissolved oxygen content, pH, salinity, etc., which can occur from seemingly unrelated events. For example, the cleaning of New York Harbor has resulted in increased dissolved oxygen content and decreased coliform pollutants, thereby allowing the resurgence of marine borers into the harbor. The borers are now consuming timber at devastating rates over short periods of time. Similarly, steel corrosion rates have noticeably increased as a result of increased dissolved oxygen content. If the inspection cycling is to be increased, serious consideration to materials and water chemistry must be given on a case-by-case basis. For these reasons, we would not recommend increasing inspection cycles beyond five (5) years.

3. We agree that scour critical bridges should be inspected after major storm events.